

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

**Claims 1 to 5. (canceled)**

**Claim 6. (currently amended)** A method of selecting ~~promising~~  
the most potential candidate nucleotide sequences of an  
analytical oligo nucleic acid for use in an analysis of a target  
nucleic acid~~[[,]] the promising candidate nucleotide nucleotide~~  
~~sequences have a high possibility of including a suitable~~  
~~nucleotide sequence of the analytical oligo nucleic acid, the~~  
method comprising:

(a) entering a nucleotide sequence of a target nucleic acid  
to be analyzed into a computer;

(b) calculating an occurrence frequency of each of n unit  
sequences occurring on the nucleotide sequence of the target  
nucleic acid on the basis of a value of  $4^n$  which ~~[[\_]]~~  
corresponds to all of the n unit sequences formed of n nucleotide  
sequences, wherein n is an integer of 2 or more;

(c) ~~extracting~~ listing all candidate sequences having p number of nucleotides and are present on the nucleotide sequences of the target nucleic acid, wherein p is an integer larger than n by m, and m is an integer of 1 or more;

(d) ~~extracting~~ listing the n unit sequences contained in each of the candidate sequences;

(e) calculating an occurrence frequency index of each of the candidate sequences on the basis of the occurrence frequency of the n unit sequence calculated in step (b), by multiplying the occurrence frequencies of all the n unit sequences contained in each candidate sequence, wherein a lower occurrence frequency index indicates a higher specificity of the candidate sequences to the target nucleic acid; ~~[[and]]~~

(f) selecting, from the candidate nucleotide sequences ~~extracted~~ listed in step (c), candidate nucleotide sequences each having a lower occurrence frequency index than a certain threshold value, thereby obtaining the ~~promising~~ potential candidate nucleotide sequences, the certain threshold value being arbitrarily set so that the ~~promising~~ potential candidate nucleotide sequences are substantially fewer than the candidate nucleotide sequences obtained from step (c) ~~and the suitable~~

~~nucleotide sequence being included in the promising candidates,~~  
and

(g) selecting, from the potential candidate nucleotide sequences of step (f), the most potential candidate nucleotide sequences having a low stability of a molecular secondary structure which is not capable of forming a stable secondary structure, and whereby the most potential candidate nucleotide sequences are capable of readily hybridizing with the target nucleic acid under hybridization conditions are selected.

**Claim 7. (original)** The method according to claim 6, wherein said n is 5, 6, or 7.

**Claim 8. (canceled)**

**Claim 9. (currently amended)** The method according to claim ~~[[8]]~~ 6, wherein the stability of the molecular secondary structure is determined by at least one property selected from the group consisting of (i) thermal stability as measured by a

value of  $T_m$  and (ii) stability of an intramolecular secondary structure.

**Claim 10. (currently amended)** The method according to claim 9, wherein a nucleotide sequence having ~~[[the]]~~ a  $T_m$  value falling within a predetermined range is selected from the ~~promising~~ potential candidate nucleotide sequences and which forms an unstable secondary structure is further selected.

**Claim 11. (currently amended)** The method according to any one of claims 6 ~~[[to]]~~ , 7, 9 or 10, wherein all of the calculations involved in steps (a) to (f) are sequentially performed by a computer.

**Claim 12. (currently amended)** The method according to any one of claims 6 ~~[[to]]~~ , 7, 9 or 10, wherein said nucleotide sequence of an analytical oligo nucleic acid is used in (i) a PCR method for detecting a specific nucleotide sequence present in a nucleotide sequence of a nucleic acid by using an enzyme reaction which requires hybridization reactions of a nucleic acid, or (ii) in a hybridization reaction of a nucleic acid employing a probe.

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**Amendments to the Drawings:**

The attached sheet of drawings includes a change to Fig. 5, wherein the spelling of "SEQUENCES" was corrected. This sheet, which includes Figs. 3 to 6, replaces the original sheet including Figs. 3 to 6.

Attachment: Replacement Drawing Sheet

Annotated Drawing Sheet Showing Changes